

REMARKS

Reconsideration of the application is respectfully requested.

The claims stand rejected as being either anticipated by U.S. Patent No. 6,587,235 issued to Chaudhuri, et al. ("Chaudhuri") and obvious in view of U.S. Patent No. 6,240,102 issued to Asano ("Asano"). Applicants respectfully disagree with the rejection for the following reasons.

Referring first to claim 17, the recited method associates two routes with different channels in different physical links. The routes provide connections to similar nodes. The second route is selected as a diverse alternate route to the first route, to reestablish a connection upon failure of the first route. **The second route is selected as the diverse alternate route by comparing the first physical link with the second physical link and selecting the second route when the links are different.** Neither Chaudhuri or Asano teaches or suggests such a method.

According to the Office Action at page 3, Chaudhuri discloses first and second physical link identifiers as Link ABC and Link ADC. However, Applicants respectfully disagree with this characterization, as "ABC" and ADC" are not links within the meaning in claim 17, but rather a list of nodes of the communication system. See also Chaudhuri, col. 2, lines 34-42 ("The protection system architecture 200 includes protection switches 210, 295 **working link 250 and protection link 260**, and DWDMs 220, 270. DWDMs 2220, 270 multiplex working lines 230, 280 and protection lines 240, 290 **on to separate working link 250 and protection link 260 between nodes A, B.**") The same nomenclature used to describe reference numbers 250 and 260 as "link" can be used to describe lines 520 and 525 in Fig. 5. Accordingly, any "physical link identifier" suggested in Chaudhuri would refer to, for example, line 1 (520) and line 2 (525). Accordingly, "ABC" and ADC" are not physical link identifiers, contrary to the statement on page 3 of the Office Action.

The above argument also underscores a difference between Applicants' method in claim 17 and the capacity restoration technique in Chaudhuri. The method recited in

claim 17 may be part of a route lookup procedure for a diverse route. Although Chaudhuri 235 describes a protection scheme, where in response to a failure signals carried by one set of working lines are switched to another set, this does not teach or suggest **how** to select the diverse alternate route. This is also true when considering Chaudhuri's explanation of Figs. 5 and 6 beginning at col. 6, line 53. There it is described that in the event of a failure, such as a fiber cut, the SP channels carried on line 520 are switched to R channels of another line 525 that links nodes A and B. However, there is no indication as to how, in other words what routing procedure is used, to select the R channels (over line 525).

Arguments similar to those above also apply to find that the rejection of claims 4, 10, and 20 as being anticipated by Chaudhuri is also improper. For example, claim 10 describes the capability of assigning first and second physical link identifiers to different routes, where each route is to use a channel in a different DWDM fiber link. The second route is selected as the diverse alternate route in that case, by comparing the first physical link identifier with the second physical link identifier (wherein when these two identifiers are different, then it is the second route that is selected as a diverse alternate route). Neither Chaudhuri or Asano teach or suggest such a procedure for selecting the diverse alternate route.

Turning now to claim 1, this claim has been amended with subject matter of dependent claims 2 and 3, in addition to further limitations that are submitted as being sufficient to distinguish the relied upon art references of Chaudhuri and Asano. In particular, amended claim 1 recites a method involving a node lookup procedure for a diverse route, where the procedure includes first, second and third routes all providing similar connections, the first and second routes being associated with channels in the same DWDM link, while the third route is associated with a channel in a different DWDM link. This third route is selected instead of the second route, as the diverse alternate route needed to establish a connection that used the first route. This selection process comprises comparing the link identifiers that have been associated to the DWDM links with the respective DWDM links. Neither Chaudhuri or Asano teach or

suggests such a technique for selecting the diverse alternate route. For example, assuming for the sake of argument that in Chaudhuri, referring now to Fig. 5, service 1-2-3-4-5-6-7-8 is switched such that the restored path for that service becomes 1-2-15-16-5-6-7-8, there is no indication as to how this decision is made in practice by the optical communication system of Chaudhuri. It is unclear, for example, whether there is any comparison of identifiers for what may be analogized as the claimed first and second links, namely reference 525 and reference 598. For instance, it may be that these two different routes or services have been predetermined and saved in a routing lookup table such that upon a failure of the line 525, a decision would be automatically made by lookup table to use the route that involves line 598. There is no suggestion that such a technique would, for example, require that identifiers for the two lines 525, 598 be compared in order to select the route containing line 598 as the diverse alternate route.

As to claim 24, this claim is written in terms of means-plus-function language and has been amended to include the means for selecting the second route as it is described in the Specification as filed, page 10, line 21 to page 11, line 11; and Figs. 8A-8B. Neither of the relied upon art references teach or suggest such a technique for selecting a diverse route.

Regarding claims 6-9 and 12-15 which were rejected as being obvious in view of Chaudhuri and Asano in combination, Applicants respectfully submit that these claims are not obvious at least because their base claims, namely claims 1, 4, 10, 16 and 20 (as amended here), are not anticipated by Chaudhuri.

CONCLUSION

In sum, a good faith attempt has been made to explain why the rejection is improper, and to amend the claims as needed to render them in condition for allowance.

If necessary, the Commissioner is hereby authorized in this, concurrent and future replies, to charge payment or credit any overpayment to Deposit Account No.

02-2666 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17, particularly, extension of time fees.

Respectfully submitted,

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CERTIFICATE OF MAILING

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage in an envelope addressed to: Mail Stop Amendment, Commissioner for Patents, Post Office Box 1450, Alexandria, Virginia 22313-1450 on September 20, 2004.


Margaux Rodriguez September 20, 2004